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Ecosystem Monitoring – Expert Group to Initiate Evaluation and Re-design

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Proposed Action: Briefing and direction

Summary: To implement Action Agenda strategy E.3.1, and section 3.1.1 of the biennial science work plan, Science Panel members and staff plan to convene an expert group on ecosystem monitoring to help initiate evaluation and re-design of the region's ecosystem monitoring efforts. This expert group will meet in early 2009 to

- develop an initial set of questions to be addressed by a status and trends monitoring program
- provide a preliminary assessment of the strengths and weaknesses of existing monitoring programs to answer these questions
- recommend next steps in monitoring program evaluation and re-design

Ken Currens will convene the expert group and provide expertise on salmon recovery monitoring. Other members of the group will provide experience and expertise in Puget Sound ecosystem monitoring of species, habitats, water quality and quantity, human health, and human well-being. A committee of Science Panel members will observe and help guide the work of this group.

Staff propose that the efforts of this group will be directed by a science-policy group that coordinates development and implementation of the Partnership's performance management systems. Through this science-policy coordination, the development of a regional ecosystem monitoring program will be aligned with directions and decisions on ecosystem indicators, adaptive management, and State of the Sound reporting. The science-policy group will ensure appropriate interactions among the monitoring expert group, any technical work groups that continue its work, and the Partnership's science panel, ecosystem coordination board, and leadership council.

Staff Recommendation: Proceed with monitoring expert group under the direction of Science Panel members and a science-policy group coordinating performance management.

Background: The science panel has discussed the monitoring expert group at its December 2008 and January 2009 meetings and has described this group as an early step in monitoring program development. The Action Agenda discusses this activity in Question 3, priority E.3.1.1:

> Align regional monitoring efforts with the goals, outcomes, strategies, and actions outlined in the Action Agenda. Evaluate existing monitoring efforts to identify opportunities to better meet Action Agenda needs by building from or adapting existing efforts or adding new efforts.

The biennial science work plan discusses this activity in section 3.1.1.2, paragraph 1:

> Develop key assessment questions. Convene a monitoring and assessment work group that makes recommendations to the Science Panel for assessment questions to be addressed by sustained monitoring and research programs. This work group will use Science Panel-endorsed criteria to prioritize the greatest needs for targeted research, effectiveness studies, and status and trends monitoring that should be addressed by sustained, integrated scientific investigations.

Analysis: Partnership consultants, Science Panel members, and others have advised the Science Panel, staff, and the Puget Sound monitoring consortium of the importance of articulating "assessment questions" as an early step in defining the scope and focus of an ecosystem monitoring program that will allow the Partnership to evaluate progress toward ecosystem recovery. Assessment questions provide a common framework, accessible to both scientists and policy experts, to express specific interests in and purposes for ecosystem monitoring.

Using the ecosystem recovery goals, desired ecosystem outcomes, key threats to those outcomes and goals, and priority strategies, included in the Action Agenda, the Partnership is now poised to articulate its assessment questions to frame Puget Sound ecosystem monitoring. A proposed monitoring expert group will develop an initial version of questions about the status of and trends in ecosystem conditions. These questions can then be refined in science-policy discussions and by engaging regional scientific community and stakeholders. The refined assessment questions can then serve as the basis for developing and refining ecosystem indicators, evaluating existing monitoring efforts, and developing an ecosystem program that meets the needs of the Partnership.

Next Steps: Invite participants in expert group, set dates for workshop(s), and prepare materials for workshops (including example assessment questions, inventory of existing monitoring, candidate processes for monitoring program evaluation and design).

Attachment: Draft invitation to monitoring expert group

Ken Currens
5 January 2009

Invitation to Provide Expert Advice on Developing an Ecosystem Monitoring Program for the Puget Sound Partnership

Summary: A key step for success of the Puget Sound Partnership is to identify the assessment questions around which we can track our progress and allow us to make better decisions. The Science Panel of the Puget Sound Partnership is convening a small panel of scientists who will develop an initial set of questions, assess the strengths and weaknesses of existing monitoring programs to answer them, recommend next steps. After review by decision makers and the larger scientific community, these recommendations will provide the foundation for improving Puget Sound monitoring during the next two years while the Partnership moves forward with designing and implementing a comprehensive, integrated ecosystem monitoring program.

Background: A key question around which the Puget Sound Partnership develops its Action Agenda is "What is the status of the Puget Sound and what are the biggest threats to it? A variety of organizations is already monitoring many aspects of the Puget Sound in different ways and in different places. Although these efforts are useful, the Partnership ultimately needs comprehensive, integrated information that provides a complete picture of status and trends of the marine and freshwaters of the Puget Sound, the habitats needed for its diverse species, human health and well-being that depend on the ecosystem benefits of the Puget Sound, and the many threats these. Designing and implementing such a program is a complex, multi-agency scientific and policy process that will require several years. A place to start is to identify the key information the Partnership needs, evaluate the kind of information provided by existing monitoring programs, and find ways to support and improve existing monitoring programs to get that information.

To do this the Partnership under the guidance of the Science Panel will assemble a team of 8-9 scientists with expertise in different parts of the Puget Sound ecosystem and monitoring. In the next six weeks, they would focus on recommendations for how to continue, improve, and add to existing monitoring programs such as PSAMP and salmon recovery monitoring that would

- Address the Partnership goals and strategies
- Recommend how to provide a well-balanced program based on what we currently know about the strengths and weakness of monitoring
- Recommend where and what kinds of monitoring to improve, expand, or initiate.

The Partnership will use the recommendations to support requests for increased funding for monitoring.

Panel Process: Panelists would need to commit a minimum of 5-7 days over the next six to eight weeks. This would involve a 2-3 day retreat and workshop, individual writing assignments, and review of a draft document. Ken Currens (on loan to the Partnership) has agreed to staff the panel as well as provide expertise on the salmon recovery monitoring. We will use Ecosystem Management Initiative process (http://www.snre.umich.edu/ecomgt/evaluation/index.htm) as a way to organize the effort. To help with the analysis, the Partnership will have completed a survey of existing monitoring programs.

Why Be Involved? This is a unique opportunity to influence the direction of ecosystem monitoring in the Puget Sound. If these recommendations were thoughtful and well crafted they would become the basis for involving the broader scientific community in helping design and build a more comprehensive ecosystem monitoring program.